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An Essay
on

Pneumonia.

Respectfully submitted
to the Faculty of the
Homoeopathic Medical College
of Pennsylvania.

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Pneumonia is an inflammation of the substance of the lungs. Pure pneumonia is a very rare disease at the present day. Indeed it is contended by some that there has not been a case of it in this country since the occurrence of the plague, so called, which appeared between the years 1815 and 1820. Others contend that it disappeared upon the approach of the cholera. It was supposed that at these periods a change took place in the condition or constitution of the atmosphere producing a change in the form of this disease. Pneumonia is common to high latitudes and regions where cold dry winds prevail. It is generally caused by exposure to cold. It may occur in any constitution and at any age, but often attacks persons of a sanguine temperament with a largely developed arterial system and at the age of puberty when that system

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is in its most active state.

Pneumonia has three stages. The first is the stage of engorgement or splenization. In this stage there is a great increase in the quantity of blood in the lungs, whereby the capillaries become very much distended giving rise to congestion which is termed engorgement. The lung assumes a dark red colour. It is heavier and its structure more dense than in its natural condition. Notwithstanding it will float on water. It crepitates less on pressure than in its sound state. There is generally no effusion in this stage and air passes freely to the air cells. A red frothy serum flows from the lung on pressure or rupture of the tissues. The pressure upon the walls of the vessels interrupts the process of nutrition and they lose their elasticity. They become relaxed and tender. Their cohesion is impaired.

In the second stage the dark red colour still continues. The lung is still more congested. Effusion

takes place through the walls of the air cells. The weight and solidity of the lung is much increased. It sinks in water and does not cupitate upon pressure. Upon cutting into the lung the mass appears granulous. It may appear red or of a varied colour from the mixture of pigmentum nigrum areolar tissue and blood in varying proportions. This is denominated the stage of red hepitization from the resemblance to the liver which is produced in the appearance of the lung by the infiltration and solidification.

The third stage supervenes upon the second by a change in the colour of the lung. It is of a lighter colour, yellow or greyish. The granular bodies become lighter coloured. a greyish colour predominates. Suppuration takes place. This is denominated the stage of grey hepitization or purulent infiltration.

Acute inflammation of the lungs sometimes terminates in gangrene although it does not generally. When this

considerable part of the lung; but there is a condition in which the disease is confined to certain pulmonary lobules.

This is generally the result of bronchitis and occurs principally in children. Abscesses sometimes result from this form of inflammation; but they are rare and are to be regarded as less dangerous to the life of the patient than extensive suppuration. Inflammation of the bronchia is always found in connection with inflammation of the parenchyma. Bronchitis may exist without pneumonia; but pneumonia does not take place without inflammation extending to the bronchia.

Auscultation and percussion have assigned certain sounds to the first & second stages of the disease and the third is made known by the absence of all the sounds. Thus the different stages can be distinguished from one another and the treatment adapted to or modified by the changes taking place within. The first sounds to be discovered by auscultation are the respiratory murmur

bronchi resembling sounds brought to the ear by sudden gusts of wind. This is termed bronchophony. There is entire dullness on percussion. The lung is swollen. It is solid and there is no resonance.

In the third stage the same condition prevails as to sounds. There may be in this, as well as in the second stage, portions of the lung where the air-cells have not been obliterated that will still admit the air. In such cases a slight respiratory murmur may be heard which is denominated puerile respiration. When portions of the lung suppurate the purulent matter may be expectorated and the air pass into the cavity with a gurgling sound.

The cough or more particularly the expectoration furnishes the pathognomonic symptom of the disease in the rust coloured sputa. They are composed of blood mucus and serum in such an intimate connection that they appear like a homogeneous unmixed secretion. There are no appearances of these sputa at the onset of the disease or

not until the blood corpuscles have penetrated through the walls of the vessels by the process of congestion. There are sputa of blood & mucus in coughing, which proceed from a different cause and can easily be distinguished from those of pneumonia. They are the sputa of bronchitis, in which the blood strikes the outside of the mass expectorated and does not form that homogeneous mass that is found in pneumonia. There are also sputa in the later stage called the prune juice sputa. They indicate the third stage. The sputa change in the last stage, in depraved constitutions, to a dirty dingy colour and emit an offensive odour indicative of a low vitality.

Delirium sometimes occurs and is a very unfavourable symptom. It indicates that the blood is not decarbonized manifesting its vitiated condition through the perverted function of the brain. Delirium indicates extensive inflammation and of the highest degree. ~~There is less pain~~

~~in this form~~ Inflammation of the pleura, the investing membrane of the lungs, generally attends this disease and where it presents

a distinct phase is called pleuro-pneumonia. It is the most common complication of pneumonia, the pleura rarely escaping inflammation from its intimate connection with the lung. It is readily distinguished by its characteristic pain. While the pain is limited to the parenchyma alone the pain will be a dull aching sensation. When the pleura becomes involved the pain will be very acute and located in the side. It is aggravated by coughing, by taking a deep inspiration, or by any cause that may produce motion in the locality affected.

Pneumonia is sometimes complicated with hepatitis.

When this occurs it is in consequence of the disease developing itself in the lower portions of the lung in proximity with the liver producing soreness under the ribs upon pressure.

The brain may become affected by this disease giving rise to typhoid-pneumonia. In this case it exhibits the typhoid characteristics to a certain extent. There is less pain in this form and more febleness, sordes and dry tongue.

Suburcles are sometimes developed in the lungs by

the occurrence of pneumonia. The duration of pneumonia averages ten days.

The prognosis is ordinarily favourable in the first and second stages, when there are no adverse collateral influences and when no dyscrasia rests upon the recuperative powers. Resolution may take place in the first or second stage and perhaps the third. When it takes place it is by the reappearance of the same symptoms in reversed order.

A fatal termination may take place in either stage of the disease. It may occur in the first stage from the extent of the engorgement depriving the blood of its vitality and fatally and rapidly deranging the functions of animal and organic life. This termination is not common. In the second stage the prognosis is not decidedly unfavourable when the system is free from any constitutional obstacle and the attack was not very violent. This being the stage of effusion, the quantity of effused

fluids may be so great as to produce a fatal termination by apnoea. In the third stage the prognosis is unfavourable. The affection must be very limited in extent to admit of a favourable termination. when there is great weakness and a dirty dingy expectoration.

Treatment

Remedies when there is palpitation of the heart.

Aconite should be used during the inflammatory stage. Merc. hourly at first until there is an abatement of the symptoms.

Belladonna will best follow aconite when there is cerebral excitement, red swollen face, red eyes and in lymphatic individuals and children.

Bryonia after fever has moderated and there is a constant desire to draw deep inspirations - when there are sharp stitches in the side - in persons of meagre habit.

Squilla sharp stitches in the side - in persons of meagre habit. Phosphorus when there are sticking pains, dyspnoea, rust-coloured sputa, paralysis of the lungs, prostration to highest point delirium. Bread water, rice water, &c.

Rhus typhoid condition or typhoid pneumonia.

Tincture of Sulphur in extensive hepatisation - in scrofulous chaectic persons and those who have a psoric diathesis.

Arnica in cases brought on by traumatic causes.

Asericum where there are great weakness and a dirty dingy expectoration which appears gangrenous.

Cantharis when there is palpitation of the heart.

China where there is loss of blood by depletion or hemorrhage.

Mercurius in cases of bronchitis with expectoration of viscid blood and mucus and where hepatitis is excited.

Nux Vomica in cases of people that are habitual drinkers and where it is complicated with piles.

Pulsatilla when the disease is complicated with measles or suppressions of menses.

Squills where there is gastric derangement.

The patient should have a quiet room - temperature from 65 to 70 and uniform. During the inflammatory stage patient should be confined to lightest farinaceous food. Bread water, rice water, or gruel.

If patient becomes much prostrated stimulants may be given.